Western Oregon UNIVERSITY

Academic Degree Program
2012-13

Major in: **Computer Science/Mathematics**

Advisor Signature:

Student Name:

Student Signature:

Student ID:

Date:

Major 106-107 hours, 36 UD	Hrs	Has	Lacks
MTH 251 Calculus I	5		
MTH 252 Calculus II	5		
MTH 253 Calculus III Sequences and Series	3		
MTH 254 Multivariate Calculus	5		
MTH 280 Introduction to Proof *	4		
MTH 341 Linear Algebra I	4		
MTH 344 Group Theory	4		
MTH 355 Discrete Mathematics	4		
MTH 365 Mathematical Probability	4		
MTH 366 Mathematical Statistics	4		
Choose three electives:	11-12		
MTH 311 Advanced Calculus I (4)			
MTH 314 Differential Equations (4)			
MTH 345 Ring Theory (4)			
MTH 346 Number Theory (4)			
MTH 351 Intro to Numerical Analysis(4)			
MTH 358 Mathematics Modeling (4)			
MTH 420 Spc Top: Applied Mathematics (3)			
MTH 441 Linear Algebra II (4)			
MTH 451 Numerical Analysis (4)			
MTH 460 Spc Top: Probability & Statistics (3)			
CS 160 Survey of Computer Science (3)	3		
CS 161 Computer Science I (5)	5		
CS 162 Computer Science II (5)	5		
CS 260 Data Structures I (3)	3		
CS 262 Programming Languages (2)	2		
CS 271 Computer Organization (4)	4		
CS 311 Data Structures II (3)	3		
CS 315 Theory of Programming Languages (3)	3		
CS 345 Theory of Computation I (3)	3		
CS 372 Operating Systems (3)	3		
CS 420 Data Management Systems (3)	3		
CS 425 Systems Analysis and Design (3)	3		
CS 430 Software Implementation (3)	3		
CS 406 Senior Seminar (1)	1		
Choose nine hours from one sequence:	9		
A) Computational Theory			
CS 440 Analysis of Algorithms (3)			
CS 445 Theory of Computation(3)			
CS 447 Compiler Design (3)			
CS 449 Topics in Computational Theory (3)			
B) System Management			
CS 450 Network Fundamentals (3)			
CS 451 Management of Info Sys (3)			
CS 452 Internet Communications (3)			
CS 453 Data Mining/Data Ware (3)			
CS 459 Topics in Sys Management (3)			

Major Cont…	Hrs	Has	Lacks
C) Software Engineering			
CS 470 Operating Systems: Adv. Topics (3)			
CS 471 Metrics and Testing (3)			
CS 473 Human Machine Interfaces (3)			
CS 474 Concurrent Systems (3)			
CS 475 Applied Computational Intelligence(3)			
CS 479 Topics in Software Engineering (3)			
Program notes & Additional Degree Requirements			
Note: Computer Science/Mathematics majors must have a grade of C- or better in courses tused to satisfy major requirements.			
Students must meet grade requirements for all listed prerequisite courses unless waived by the course instructor and the computer science division chair.			
A minor is not required for this major			
Minimum degree requirements of at least:			
180 or more total credit hours			
62 Upper Division credit hours			
45 of last 60 credits earned at WOU campus			
BA Degree Requirements			
CS 101 or higher			
Math 105 or higher			
Writing Intensive:			
Foreign Language:			
BS Degree Requirements			
CS121 or higher			
Math 111 or higher			
CS/Math/Stats:			
Diversity:			
Writing Intensive:			